



PRICE \$34.95

## INTRODUCTION

The Saturn is a single-channel, super-regenerative, tone receiver of the highest quality. It supersedes the well-known and original 3-volt receiver, the RT1-3V. Into the Saturn is poured the experience gained from the various versions of the RT-1-3V & all the engineering improvements possible. This receiver is designed to provide the R/C'er with maximum reliability, simplicity of installation, indestructible ruggedness, minimum battery requirements, and minimum size and weight. It is extremely sensitive and is designed for operation over the greatest temperature range of any transistor R/C super-regenerative receiver on the market.

## DESIGN SPECIFICATIONS

Sensitivity: 2 microvolts typical  
 Selectivity (R.F.): 400 Kc at 5 microvolts input

Audio Band Pass: 300 cps minimum  
 500 cps optimum  
 700 cps maximum

Detector Tuning Shift (R.F.): .23 Kc/degree F. typical 25 Kcs over specified temperature range  
 Audio Response Shift: 0.4 cps/degree F. typical 50 cps over specified temperature range  
 Temperature Operating Range: 0° F. to 130° F. (without reduced sensitivity or extra battery addition).  
 Relay Current Change: 40 ma typical  
 Relay Setting: Pull-in 24 ma (maximum), 20 ma (optimum), Drop-out 18 ma (minimum).  
 Idle Current (No Transmitter Carrier): 10 ma @ 80 F., (typical value only).  
 Idle Current (Transmitter Carrier On): 6 ma all temperatures  
 Relay Pulse Response: 15 pps (typical)  
 Operating Voltage: 3.1 Volts (Maximum), 1.9 Volts (minimum)  
 Tuning Range: 26 to 29 mc (typical)

## PHYSICAL SPECIFICATIONS:

Weight: 2-1/2 ounces  
 Length: 2-3/8"  
 Width: 1-1/2"  
 Height: 1"

Case & Cover: Aluminum .030" and .020" respectively, blue anodized  
 Printed Circuit Board: Photo-etched, one ounce bonded copper to glass epoxy. Silver emersion finish.

## TRANSMITTER REQUIREMENTS:

R. F. Frequency: Any standard citizen's band frequency (excluding 465 mc)  
 Audio Modulation Frequency: 300 cps to 700 cps. Optimum, 500 cps.  
 Per Cent Modulation: 80% or more

The CG Venus transmitter is recommended.

## GENERAL REMARKS:

There are many qualities of the Saturn that would pass unnoticed by the casual observer unless close comparison to competitive equipment is made. Compare the following features of the Saturn:

## FEATURES:

- (1) The well-made and attractive case.
- (2) The glass-epoxy printed circuit board -- not the commonly used paper epoxy that shatters in cold weather.
- (3) The power relay -- strong spring settings and high current changes replace the highly sensitive and malfunctioning relay of yesterday. No more constant adjusting or cleaning.
- (4) The narrow audio band pass which offers unusual unwanted signal rejection for a super-regenerative type receiver. The likelihood of destructive interference is lessened.
- (5) THE GUARANTEED TEMPERATURE OPERATING RANGE OF 0°F to 130°F.
- (6) The versatility of use, from escapements to pulse proportional.
- (7) The ability to operate from the 3 volt batteries powering the actuator.
- (8) The top-grade, first-quality components used throughout; no factory reject or foreign-made components.